

WHAT IS CLAIMED IS:

1. A system for bi-directional communication comprising:  
a first host capable of transmitting multiplexed data at a first transmission rate and operating with a first congestion window, wherein the first host is also capable of  
5 receiving multiplexed data at a second transmission rate from a second host capable of operating with a second congestion window, and wherein the first host is capable of configuring at least one of a size of the first congestion window and a size of the second congestion window based upon the first transmission rate, the size of the second congestion window, the second transmission rate and the size of the first congestion  
10 window.
2. A system according to Claim 1, wherein the first host is capable of configuring at least one of a size of the first congestion window and a size of the second congestion window such that a product of the first transmission rate and the size of the  
15 second congestion window approximately equals a product of the second transmission rate and the size of the first congestion window.
3. A system according to Claim 1, wherein the second host is capable of receiving multiplexed data into a second reception window from the first host, wherein  
20 the first host is capable of configuring a size of the first congestion window based upon a maximum size of the first congestion window, and wherein the first host is capable of configuring the maximum size of the first congestion window based upon a size of the second reception window.
- 25 4. A system according to Claim 1, wherein the first host is capable of receiving multiplexed data into a first reception window, and wherein the first host is capable of configuring the size of the second congestion window based upon a size of the first reception window.
- 30 5. A system according to Claim 4, wherein the first host is capable of configuring the size of the second congestion window by:

determining a size of the first reception window based upon a maximum size of the first congestion window and the first and second transmission rates; and

transmitting multiplexed data to the second host indicating the size of the first reception window such that the second host configures the size of the second congestion window based upon the size of the first reception window.

6. A system according to Claim 5, wherein the first host is capable of determining a size of the first reception window by multiplying the maximum size of the first congestion window by the second transmission rate and dividing the product by the first transmission rate.

7. A system according to Claim 1, wherein the first host is capable of continuously transmitting multiplexed data and receiving multiplexed data from the second host, and wherein the first host is capable of continuously configuring at least one of the size of the first congestion window and the size of the second congestion window.

8. A method of bi-directional communication between a first host and a second host, the method comprising:  
transmitting multiplexed data at a first transmission rate from the first host operating with a first congestion window;  
receiving multiplexed data at a second transmission rate from the second host operating with a second congestion window; and  
configuring at least one of a size of the first congestion window and a size of the second congestion window based upon the first transmission rate, the size of the second congestion window, the second transmission rate and the size of the first congestion window.

9. A method according to Claim 8, wherein configuring at least one of the size of the first congestion window and the size of the second congestion window comprises configuring at least one of the size of the first congestion window and the size of the second congestion window such that a product of the first transmission rate and the

size of the second congestion window approximately equals a product of the second transmission rate and the size of the first congestion window.

10. A method according to Claim 8, wherein the second host is capable of  
5 receiving multiplexed data into a second reception window from the first host, wherein  
configuring a size of the first congestion window comprises configuring a size of the first  
congestion window based upon a maximum size of the first congestion window, and  
wherein configuring a maximum size of the first congestion window comprises  
10 configuring a maximum size of the first congestion window based upon a size of the  
second reception window.

11. A method according to Claim 8, wherein receiving multiplexed data  
comprises receiving multiplexed data into a first reception window, and wherein  
configuring a size of the second congestion window comprises configuring a size of the  
15 second congestion window based upon a size of the first reception window.

12. A method according to Claim 11, wherein configuring a size of the second  
congestion window comprises:  
determining a size of the first reception window based upon a maximum size of  
20 the first congestion window and the first and second transmission rates; and  
transmitting multiplexed data to the second host indicating the size of the first  
reception window such that the second host configures the size of the second congestion  
window based upon the size of the first reception window.

25 13. A method according to Claim 12, wherein determining a size of the first  
reception window comprises determining a size of the first reception window by  
multiplying the maximum size of the first congestion window by the second transmission  
rate and dividing the product by the first transmission rate.

30 14. A method according to Claim 8, wherein transmitting multiplexed data  
and receiving multiplexed data comprise continuously transmitting multiplexed data and

receiving multiplexed data, respectively, and wherein configuring at least one of a size of the first congestion window and a size of the second congestion window comprises continuously configuring at least one of a size of the first congestion window and a size of the second congestion window.

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15. A computer program product for bi-directional communication between a first host and a second host, the computer program product comprising a computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program code portions comprising:

10 a first executable portion for transmitting multiplexed data at a first transmission rate from the first host operating with a first congestion window;

a second executable portion for receiving multiplexed data at a second transmission rate from the second host operating with a second congestion window; and

15 a third executable portion for configuring at least one of a size of the first congestion window and a size of the second congestion window based upon the first transmission rate, the size of the second congestion window, the second transmission rate and the size of the first congestion window.

16. A computer program product according to Claim 15, wherein the third  
20 executable portion is adapted to configure at least one of the size of the first congestion window and the size of the second congestion window such that a product of the first transmission rate and the size of the second congestion window approximately equals a product of the second transmission rate and the size of the first congestion window.

25 17. A computer program product according to Claim 15, wherein the second host is capable of receiving multiplexed data into a second reception window from the first host, wherein the third executable portion is adapted to configure the size of the first congestion window based upon a maximum size of the first congestion window, and wherein the third executable portion is adapted to configure the maximum size of the first  
30 congestion window co based upon a size of the second reception window.

18. A computer program product according to Claim 15, wherein the first executable portion is adapted to receive multiplexed data into a first reception window, and wherein the third executable portion is adapted to configure the size of the second congestion window based upon a size of the first reception window.

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19. A computer program product according to Claim 18, wherein the third executable portion is adapted to configure the size of the second congestion window by:  
determining a size of the first reception window based upon a maximum size of the first congestion window and the first and second transmission rates; and

10 transmitting multiplexed data to the second host indicating the size of the first reception window such that the second host configures the size of the second congestion window based upon the size of the first reception window.

20. A computer program product according to Claim 19, wherein the third  
15 executable portion is adapted to determine a size of the first reception window by multiplying the maximum size of the first congestion window by the second transmission rate and dividing the product by the first transmission rate.

21. A computer program product according to Claim 15, wherein the first and second executable portions are adapted to continuously transmit multiplexed data and receive multiplexed data, respectively, and wherein the third executable portion is adapted to continuously configure at least one of a size of the first congestion window and a size of the second congestion window.